ARCAM USB DAC - FAQ

My ARCAM DAC is plugged into my PC but I get no audio or I get sound out of my laptop speakers. What gives?

It is possible that the DAC is not the default sound playback device, and thus audio is still coming out of the normal PC sound card or laptop speakers. (The DAC's green light shows that the host PC is aware of the DAC as an audio device, and is operating correctly).

To prevent this from happening, please connect your DAC / plug in your rWave before starting your audio application (e.g. iTunes, Windows Media Player etc).

The procedure to change the default sound playback device varies by operating system. As the device is plugged in or unplugged, the operating system may or may not automatically select the Arcam DAC as the default device.

Windows XP:

Via the Control Panel, open Sounds and Audio Devices. The third tab, Audio, shows a drop-down box to select the default sound playback device. Select the Arcam device.

Sounds and Audio Devices Properties					
Volume Sounds Audio Voice Hardware					
Sound playback					
Default device:					
Arcam DAC					
<u>V</u> olume Adva <u>n</u> ced					
Sound recording					
Default device:					
ASUS Xonar DS Audio					
Volume Advanged					
MIDI music playback					
Default device:					
Microsoft GS Wavetable SW Synth					
Volume About					
OK Cancel Apply					

Mac OS X:

Via the Apple in the top-left corner of the screen, select System Preferences. Under the Hardware section, select Sound. Select the 'Output' tab. From the list of devices in the Output tab, select the Arcam device.

	Sound Effects Output Input
Select a device for so	und output:
Name	Туре
Internal Speakers	Built-in
Arcam DAC	
Settings for the select	ed device: The selected device has no output controls
Settings for the selecto	ed device: The selected device has no output controls
Settings for the selecte Use audio pc	ed device: The selected device has no output controls ort for: Sound Output

Windows Vista / 7:

Via the Control Panel, select the Sound item. The Playback tab shows a list of playback devices. Select the Arcam device.

Playback Re	cording Sounds Communications	
Select a pla	yback device below to modify its settings: Speakers Arcam DAC Default Device	
	Speakers Realtek High Definition Audio Ready	
	Realtek Digital Output Realtek High Definition Audio Ready	
<u>C</u> onfigur	e Set Default V Prope	erties
	OK Cancel	Apply

Linux distributions:

The two most popular window systems, GNOME and KDE provide system configuration utilities to select the playback device. As this varies by distribution, by version and by users' specific configurations, we cannot provide detailed instructions here. However, all linux systems that we tested in 2012 somewhere facilitated changing the playback device. Select the Arcam device.

Note: D33 users should select class II input for Linux. rPAC (class I only) is not compatible with the current Linux kernel.

My ARCAM DAC is plugged into my PC, the USB indicator is selected and shows green (rDAC only), but I get no audio. It is the default USB audio device, but I still get no sound (or sound through my laptop speakers) for my open application.

Some operating systems such as Windows XP cannot switch between different audio outputs whilst an application (such as iTunes, Windows Media Player or a web browser) is running. The solution is to connect and install the DAC before starting any audio applications. If you have already started an audio application before plugging in the DAC, close and re-open the application.

It is advisable to plug in the DAC before turning your computer on, so that it will be fully initialised before you start any of your applications.

I keep hearing operating system sounds through my hi-fi system when my ARCAM DAC is connected. I do not want to hear sounds every time I get an email, click a link etc. How can I stop these?

Operating system sounds can be turned off using the settings controls for each particular operating system.

Windows XP: Via the Control Panel, open Sounds and Audio Devices. The second tab, Sounds, shows a drop-down box to select the sound scheme. Select the sound scheme called "No Sounds". Press the OK button to confirm.

	Audio Device	s Properci	es	<u> </u>
Volume	Sounds	Audio	Voice	Hardware
A sound so and progra have modi	:heme is a set (ims. You can s(fied.	of sounds ap elect an exis	plied to event ting scheme o	s in Windows r save one you
Sound s <u>c</u> ł	ieme:			
No Sound	ls			
		9	Sav <u>e</u> As	Delete
sound sch Program e	eme. vents: lows			
4	vsterisk Close program			
	Critical Battery A	Marm		
	Critical Battery A Critical Stop)efault Beep	Alarm		•
(((Sounds:	Critical Battery A Critical Stop Default Beep	Alarm		•
((((Sounds: (None)	Critical Battery A Critical Stop Default Beep	Alarm		▼ <u>B</u> rowse

Windows 7:

Via the Control Panel, open Sound. The third tab, Sounds, shows a drop-down box to select the sound scheme. Select the sound scheme called "No Sounds". Press the OK button to confirm.

Pla	yback Recording Sounds Communications
1 1	A sound theme is a set of sounds applied to events in Windows and programs. You can select an existing scheme or save one you have modified.
1	Sound Sc <u>h</u> eme:
	No Sounds Save As Delete
	Program Events:
	Asterisk
	Close Program
	Critical Battery Alarm
	Critical Stop
	Default beep
	Play Windows Startup sound
	Sounds:
	(None) Test Browse
_	
	OK Cancel Apply

MacOS X:

Via the Apple in the top-left corner of the screen, select System Preferences. Under the Hardware section, select Sound. In the 'Sound Effects' tab, click the tickbox labelled 'Play user interface sound effects' to remove the tick. If you still hear unwanted sounds, drag the slider labelled 'Alert volume' all the way to the left.

	Sound Effects Output Input	
Choose an alert sound		
Name	Type	1
Blow	Built-in	ñ
Bottle	Built-in	C.
Frog	Built-in	
Funk	Built-in	
Alert Volume	 Play user interface sound effects Play feedback when volume is changed Play Front Row sound effects 	C
Output volume	Mute Motion (€) Mute	

My ARCAM DAC is plugged into my PC, has the green USB indicator (not rWave), is selected as the playback device, but still I get no audio. What gives?

It has been observed during product development and testing that some operating systems occasionally require manual intervention in order for the DAC to install successfully. This is most likely to occur if the DAC is plugged into a different USB port on a PC to where it was previously connected.

Windows XP exhibits this issue. The remedy is to "un-install" the device from the operating system to give Windows XP a clean start when the DAC is next attached. Follow these instructions (with the rDAC connected) to remove the rDAC from Windows XP, then re-attach the rDAC.

1) Via the Control Panel, select System. In the System Properties, select the Hardware tab. Click the button Device Manager.

System Prop	erties			<u>₿?</u> ×			
System	Restore	Automat	ic Updates	Remote			
General	Computer I	Name	Hardware	Advanced			
- Device M	fanager The Device Mana; on your computer. properties of any d	gerlists all t Use the De evice.	he hardware device vice Manager to ch	es installed hange the			
Drivers	Driver Signing lets compatible with Wi how Windows con	you make s indows. Wir nects to Wi	ure that installed dr ndows Update lets j indows Update for d	ivers are you set up drivers.			
	Driver <u>S</u> igni	ing	<u>W</u> indows U	Ipdate			
Hardware	Hardware Profiles Hardware profiles provide a way for you to set up and store different hardware configurations. Hardware Profiles						
		ОК	Cancel	Apply			

2) In the Device Manager, under the View menu, turn on the option Show Hidden Devices.



3) Expand the section in the tree Sound, video and game controllers.



4) Highlight the item USB Audio Device. This is *likely* to be the Arcam DAC, but could be another audio device if there are multiple USB Audio Devices in your system.

5) Right-click on the USB Audio Device item, and select Uninstall. Confirm the warning prompt with OK. If you have multiple USB Audio Devices listed, uninstall all of them.

📮 Device Manager	
<u>File Action Vi</u> ew <u>H</u> elp	
ARC-PC02 Image: Computer Image: Disk drives Image: Disk drives Image: DVD/CD-ROM drives <t< td=""><td></td></t<>	
Uninstalls the driver for the selected device.	

6) Disconnect the Arcam DAC from the PC, and reconnect.

7) There will be various notifications in yellow bubbles near the system clock, ending with a message saying the your new hardware is ready to use.

My ARCAM DAC is working fine, but is a very quiet, what should I check? Windows:

The default volume level for Windows is half volume, this can be set to full in the control panel.

My ARCAM DAC is working fine, but I would like to fix the sampling frequency sent to it instead of allowing the operating system to upsample to the maximum supported rate - how do I do this?

MacOS X:

To fix the sampling rate of the output to your Arcam DAC, select "Finder" "Places : Applications" > "Utilities" > "Audio Midi Setup.app". Then select "Audio Devices".

For the "System Output" select "Built In Output". Then select the Arcam DAC as the "Default Output". The in "Properties For" select the Arcam DAC and choose the appropriate sampling frequency in the "Audio Output" section. This should match the native sampling frequency of the material being played. For CD material, this will be 44.1kHz. Note, if iTunes is open, you should stop & restart iTunes for any change to take effect.

	Built-in Input 2 in/ 0 out	ŧ	ARCAM L	JSB :	ARCAM Inte	rnal C	lock	•	
٩	Built-in Output 0 in/ 2 out	()				Out	nut		
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			Sour	rce:	Default				\$
			Form	nat:	192000.0 Hz	•	2ch-24t	oit	\$
			Ch V	/olum	e		Value	dB	Mut
			M =	-		_0	1.00	0.00	
			1: =	_		-0	1.00	0.00	
			Z: =			_0	1.00	0.00	

Windows 7:

In the control panel, using the advanced tab, it is possible to set the sampling frequency. Depending on your application, you will need to obtain the ASIO plugin & configure this to allow the playback programme to output the native sampling frequency to your Arcam DAC. We have found that the plugins for Winamp (www. winamp.com) and Foobar (www.foobar2000.org) work well.

Speakers Properties
General Levels Enhancements Advanced
Default Format
Select the sample rate and bit depth to be used when running in shared mode.
16 bit, 44100 Hz (CD Quality) Test
Exclusive Mode Image: Construction of the second
Restore Defaults
OK Cancel Apply

Windows XP:

Depending on your application, you will need to obtain the ASIO plugin & configure this to allow the playback programme to output the native sampling frequency to your Arcam DAC. We have found that the plugins for Winamp (www.winamp.com) and Foobar (www.foobar2000.org) work well.

My ARCAM DAC sometimes gives playback dropouts over USB - what should I try?

If playback interrupts are heard over USB, it is advisable to shut down all applications other than the audio playback interface.

Also, you should try and ensure that the Arcam device does not share a USB controller with any other devices.

To ensure that the Arcam device is running on its own dedicated USB controller is largely a matter of trial-and-error. Normally the physical USB port will be connected to a "smart" controller that automatically changes from USB 1.1 (Full Speed) to USB 2.0 (High Speed or "Enhanced), depending on the requirements of the attached peripheral device. However, there will not be a dedicated controller for each port, so sometimes it requires some trial and error to find an arrangement where the Arcam device has its own dedicated USB controller.

You should try connecting various combinations of USB devices into the USB ports and check in the Device manager where each device is connected. If you run out of ports and need to use a hub, only connect slower device (e.g. keyboard or mouse) to the hub. Never connect your Arcam device through a hub.

Tip: Sometimes the USB ports on the front of a desktop PC will have extra cabling that may cause problems, so the USB ports on the rear can give better results. For laptop PCs it can be the USB ports on the rear or one side that will provide better results than those on the front or the other side.

To determine which USB device is connected to which controller, go to "Start" > "Control Panel" > "System" > "Hardware" > "Device Manager". Then select "View" > "Devices by connection". Expand the tree to find the USB devices and identify the devices that are connected. Below is an example from a Windows XP system.



Once you have found the ARCAM device, you can see that this is the only device on the "Enhanced" (which means "High Speed" or USB 2.0) USB controller.

Windows 7 looks a little different, but the goal is the same, to ensure that the Arcam device is the only device connected to the Enhanced USB controller:



MacOS X:

All of the above comments about conenctions are equally valid for OSX. To determine which USB device is connected to which controller, go to "Apps" > "Utilities" > "System Profiler" > "USB" Below is an example from an OSX system.

Once you have found the ARCAM device, you can see that this is the only device on the "High-Speed Bus" controller.

000	MacBook Pro	
Nicholas Clarke's MacBool	< Pro	19/12/2011 10:54
Contents	USB Device Tree	
▼ Hardware	VUSB Bus	0
ATA	Apple Internal Keyboard / Trackpad	
Audio (Built In)	IR Receiver	
Bluetooth	VUSB Bus	
Card Reader	▼ BRCM2046 Hub	
Diagnostics	Bluetooth USB Host Controller	
Disc Burning	VUSB High-Speed Bus	
Ethernet Cards	Built-in iSight	
Fibre Channel	VUSB High-Speed Bus	4
FireWire	ARCAM USB Audio 2.0	v
Graphics/Displays	4	Li
Hardware RAID	USB Bus:	0
Memory	User Controller Learning, Built in USB	
PCI Cards	Host Controller Driver: AppleI/SROHCI	
Parallel SCSI	PCI Device ID: 0x0aa5	
Power	PCI Revision ID: 0x00b1	
Printers	PCI Vendor ID: 0x10de	
SAS	Bus Number: 0x04	
Serial-ATA	Apple Internal Keyboard / Trackpad:	
Thunderbolt	, spire internal response (racipati	
USB	Product ID: 0x0237	
▼ Network	Vendor ID: 0x05ac (Apple Inc.)	
AirPort	Version: 0.81	
Firewall	Manufacturer: Apple Inc.	
Locations	Location ID: 0x04600000 / 3	
Modems	Current Available (mA): 500	
Volumes	Current Required (mA): 40	
WWAN	ID Pacaivar	Ŧ
▼ Software		1